

Supplementary Table 1 Detailed information of selected studies for analyses of phenotype and cancer risk

Author Name	Year	Ethnicity	Design ^a	Match ^b	Case/Control		Adjusted factors ^c							
							age	fmc	smoke	drink	BMI	mutual	rev	other
Prostate cancer														
Wolk	1998	Caucasian	P-based	Yes	210	224	Yes	No	No	No	Yes	Yes	No	No
Chan	1998	Caucasian	Nested	Yes	152	152	Yes	No	Yes	No	Yes	Yes	Yes	No
Finne	2000	Caucasian	H-based	No	176	486	Yes	No	No	No	Yes	Yes	No	No
Stattin	2000	Caucasian	Nested	Yes	149	298	Yes	No	Yes	No	Yes	Yes	No	No
Harman	2000	Mixed	Nested	No	72	203	No	No	No	No	No	Yes	No	No
Chokkalingam	2001	Asian	P-based	Yes	128	306	Yes	No	No	No	No	Yes	Yes	No
Lacey	2001	Caucasian	H-based	Yes	30	60	No	No	No	No	No	Yes	No	No
Chan	2002	Caucasian	Nested	Yes	530	534	Yes	No	Yes	No	No	Yes	No	No
Li	2003	Caucasian	H-based	Yes	408	437	Yes	No	No	No	No	No	No	No
Nam	2003	Mixed	H-based	No	483	804	Yes	Yes	No	No	No	No	No	No
Woodson	2003	Caucasian	Nested	Yes	100	400	Yes	No	No	No	Yes	Yes	No	No
Stattin	2004	Caucasian	Nested	Yes	281	560	No	No	No	No	No	Yes	No	No
Oliver	2004	Mixed	P-based	Yes	176	324	Yes	No	Yes	No	No	Yes	No	No
Meyer	2005	Caucasian	Nested	Yes	100	400	Yes	No	Yes	Yes	Yes	No	No	No
Platz	2005	Mixed	Nested	Yes	462	462	Yes	No	No	No	No	Yes	No	No
Chen	2005	Mixed	H-based	Yes	174	174	Yes	No	No	No	Yes	Yes	No	No
Severi	2006	Caucasian	Nested	No	524	1826	Yes	No	No	Yes	No	No	No	Yes
Hernandez	2007	African American	H-based	Yes	401	366	Yes	No	No	No	Yes	No	No	No
Weiss	2007	Mixed	Nested	Yes	727	887	Yes	No	No	No	No	Yes	No	No
Allen	2007	Caucasian	Nested	Yes	630	630	No	No	No	No	No	No	No	No
Borugian_Asian	2008	Asian	Nested	Yes	33	142	Yes	No	No	No	No	No	No	No
Borugian_white	2008	Caucasian	Nested	Yes	34	150	Yes	No	No	No	No	No	No	No

Borugian_black	2008	African American	Nested	Yes	29	124	Yes	No	No	No	No	No	No	No	
Premenopausal breast cancer															
Hankinson	1998	Caucasian	Nested	Yes	76	105	Yes	Yes	No	No	Yes	Yes	Yes	Yes	
Del Giudice	1998	Mixed	H-based	No	99	99	Yes	No	No	No	Yes	No	No	No	
Toniolo	2000	Caucasian	Nested	Yes	172	486	Yes	Yes	No	No	No	Yes	Yes	Yes	
Muti	2002	Caucasian	Nested	Yes	69	267	Yes	No	No	No	Yes	Yes	Yes	Yes	
Krajcik	2002	Caucasian	Nested	Yes	66	66	Yes	No	No	No	No	Yes	No	Yes	
Yu	2002	Asian	Nested	Yes	171	170	Yes	Yes	No	No	Yes	Yes	Yes	Yes	
Sanderson	2004	Asian	P-based	Yes	250	252	Yes	No	No	No	No	No	No	Yes	
Rinaldi	2005	Caucasian	Nested	Yes	138	259	Yes	No	No	No	No	Yes	No	No	
Allen	2005	Caucasian	Nested	Yes	70	209	Yes	No	No	No	Yes	Yes	No	No	
Schernhammer	2006	Caucasian	Nested	Yes	239	478	Yes	Yes	No	No	Yes	Yes	Yes	Yes	
Rollison	2006	Caucasian	Nested	Yes	175	175	Yes	No	No	No	No	Yes	No	No	
Postmenopausal breast cancer															
Hankinson	1998	Caucasian	Nested	Yes	305	483	Yes	Yes	No	No	Yes	Yes	Yes	Yes	
Toniolo	2000	Caucasian	Nested	Yes	115	220	Yes	Yes	No	No	No	Yes	Yes	Yes	
Muti	2002	Caucasian	Nested	Yes	64	238	Yes	No	No	No	Yes	Yes	Yes	Yes	
Krajcik	2002	Caucasian	Nested	Yes	60	60	Yes	No	No	No	No	Yes	No	Yes	
Yu	2002	Asian	Nested	Yes	128	130	Yes	Yes	No	No	Yes	Yes	Yes	Yes	
Sanderson	2004	Asian	P-based	Yes	147	145	Yes	No	No	No	No	No	No	Yes	
Schairer	2004	Caucasian	H-based	Yes	185	159	Yes	No	No	No	Yes	Yes	Yes	Yes	
Allen	2005	Caucasian	Nested	Yes	47	141	Yes	No	No	No	Yes	Yes	No	No	
Rollison	2006	Caucasian	Nested	Yes	91	91	Yes	No	No	No	No	Yes	No	No	
Colorectal cancer															
Ma	1999	Caucasian	Nested	Yes	193	318	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No
Giovannucci	2000	Caucasian	Nested	Yes	79	158	No	No	No	No	Yes	Yes	Yes	Yes	No

Kaaks	2000	Caucasian	Nested	Yes	102	200	Yes	No	Yes	No	Yes	Yes	Yes	No	
Probst-Hensch	2001	Asian	Nested	Yes	135	661	Yes	No	Yes	Yes	Yes	Yes	No	No	
Ma	2001	Caucasian	Nested	Yes	193	318	Yes	No	Yes	Yes	Yes	Yes	No	No	
Palmqvist	2002	Caucasian (Sweden)	Nested	Yes	168	336	Yes	No	Yes	No	Yes	Yes	Yes	No	
Nomura	2003	Asian(Japanese American)	Nested	Yes	282	282	Yes	No	Yes	Yes	Yes	Yes	No	No	
Wei	2005	Caucasian	Nested	Yes	137	262	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Otani_men	2007	Asian	Nested	Yes	196	392	Yes	Yes	Yes	Yes	Yes	Yes	No	No	
Otani_women	2007	Asian	Nested	Yes	179	358	Yes	Yes	Yes	Yes	Yes	Yes	No	No	
Gunter	2008	Caucasian	Nested	No	438	816	Yes	No	No	No	No	No	No	No	
Endometrial cancer															
Petridou	2003	Caucasian	H-based	Yes	84	84	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	
Augustin	2004	Caucasian	H-based	Yes	73	108	Yes	No	No	No	Yes	No	Yes	Yes	
Lacey	2004	Mixed	P-based	Yes	405	297	Yes	No	No	No	Yes	No	No	No	
Oh	2004	Mixed	H-based	Yes	80	80	No	No	No	No	Yes	No	No	No	
Lukanova	2004	Caucasian	Nested	Yes	166	315	Yes	No	No	No	Yes	No	Yes	Yes	
Lung cancer															
Yu	1999	Mixed	H-based	Yes	204	218	Yes	Yes	Yes	No	Yes	Yes	No	Yes	
Lukanova	2001	Caucasian	Nested	Yes	93	186	Yes	No	Yes	No	Yes	Yes	Yes	Yes	
London	2001	Asian	Nested	Yes	230	740	Yes	No	Yes	No	No	Yes	No	No	
Spitz	2002	Caucasian	Nested	Yes	159	297	Yes	No	Yes	No	Yes	Yes	No	No	
Ahn	2006	Caucasian	Nested	Yes	200	400	Yes	No	Yes	No	Yes	Yes	No	No	
Ovarian cancer															
Lukanova	2002	Mixed	Nested	Yes	132	263	Yes	No	No	No	Yes	Yes	Yes	Yes	
Dal Maso	2004	Caucasian	H-based	Yes	59	108	Yes	No	Yes	No	No	Yes	Yes	Yes	
Peeters	2007	Caucasian	Nested	Yes	214	388	Yes	No	No	No	Yes	No	Yes	No	

Tworoger	2007	Mixed	Nested	Yes	222	599	Yes	No	No	No	No	No	Yes	No
Pancreatic Cancer														
Stolzenberg-Solomon	2004	Caucasian	Nested	No	93	400	Yes	No	Yes	No	Yes	Yes	No	Yes
Lin	2004	Asian	Nested	Yes	69	207	No	No	Yes	No	Yes	Yes	No	No
Wolpin	2007	Mixed	Nested	Yes	212	635	Yes	No	Yes	No	Yes	Yes	Yes	No
Other cancer types														
Zhao	2003	Caucasian	H-based	Yes	154	154	Yes	No	Yes	No	No	Yes	No	No
Serrano	2006	Mixed	H-based	Yes	41	74	No	No	Yes	No	No	Yes	Yes	No
Morris	2006	European	Nested	Yes	1051	3142	Yes	No	Yes	Yes	Yes	Yes	No	No
Schaffer	2007	Mixed	H-based	Yes	329	621	Yes	No	No	No	No	Yes	Yes	No
Pham	2007	Asian	Nested	Yes	161	314	Yes	No	Yes	No	Yes	No	No	Yes

^aDesign=study design, nested=nested case-control study; P-based=population-based case-control study; H-based=hospital based case-control study

^bMatched=the situation of matched design

^cAdjusted factors: fmc=family history of cancer; mutual=mutual adjustment of IGF1 (or IGFBP3), rev=sex hormones, hormone replacement therapy, with or without reproductive, others=area, economic and education status and so on.